



# MANNING SEED COMPANY

DEXTER HORTON BUILDING SEATTLE 4, WASHINGTON, U.S.A.

### AVAILABLE DOUGLAS FIR SEED - by LOT NUMBERS

#### CERTIFIED MANINGSEED

Region, Zone * and Elevation	COLLECTION AREAS	Nearest Weather ** Station Number
Lot No.		
(Region 1) <u>13-0.5</u>	Forks (Sappho)	7
(Region 2) 22-0.5 51-0.5 53-0.5	Hoquiam San Juan Camano Island	Between 19 and 16 32 33
(Region 5) 55-1.0 55-2.0 56-1.0 56-2.0	Sequim Sequim Quilcene Quilcene (Louella)	33 5 5 14 14 +
(Region 6) 65-1.0 72-1.0 72-2.0 73-1.0	Darrington Enumclaw Enumclaw Graham	51 Between 60 and 71 Between 60 and 72 71
(Region 7) 74-0.5 75-0.5 76-1.0 77-0.5	Elma Yelm Tenino Pe Ell	Between 18 and 84 Between 37 and 81 Between 85 and 37 89
78-2.0 79-1.0 79-2.0 82-1.0 83-2.0 (Region 8) 84-2.0	Ashford (National) Castle Rock Castle Rock Vernonia Yacolt Eslacadia	Between 74 and 76 95 95 + 113 + 100 + 125
86-1.0 87-1.0 88-1.0 89-2.0	Sweet Home Lowell Cottage Grove Santiam River	Between 153 and 154 159 157 Between 135 and 160
(Region 10)102-2.0	Wind River	105
(Canada) B10-2.0	Shuswap	Rainfall 19 inches

<sup>\*</sup> The first numeral of the Lot Number is the region - see Bulletin No. 1 for full explanation. The second numeral is the exact cone collection zone -- see MANINGSEED Douglas Fir Site Maps for details. The number following the dash is the elevation range in thousands of feet, according to this table:

0.5 = 0 to 500 feet 1.0 = 0 to 1000 feet 2.0 = 1001 to 2000 feet 3.0 = 2001 to 3000 feet

\*\* See Booklet: "Better Douglas Fir Forests from Better Seed", pages 40-45.

Adjustment in weather station data is necessary because of higher elevation.

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	Forks (Sappho)	(Ragion 1) 12-0-5
Between 19 and 16	Hoquisa San Juan	(Region 2) 22-0.5
23	binsis onsmed	
3	mirpet	(Logical 5) 55-2-0 55-2-0
	Sequita	0.5-22
di.	Quilcome	0.1-86
	Quilcene (Louelle)	
I.	Darrington	Capture 6) (September 1
If Bretod gowley		TO I S
Between 60 shu 72		10,5-59
Petween 18 and Sh Setween 37 and Sh	marioro	73-1-0
Between 18 and 82	Eine	(Segton V) Theb.S
Id his TE neowiell	Yelm	7.0-5
Between 35 and 37	Tenino	
10	THE OF	2.0-17
Rotween 74 and 76	(Mational)	0.5-88
	Chable Rock	0.1-67
	Castle Hock Vernomia	19-2.0 0.1-20
4 001	Japay	0.0.00
ZZE	Falacalla	O.S. 38 (8 noteon)
Between 153 and 15b	Sweet Home	0.1-88
150	Lievod	87-1.0
Y = 2	evoca pastico.	0.1-08
Botween AST and 360	sould malduce	89-2.0
Sor	Wind Biver	(Revisor 10) 102-2.0
senout Ri listares	Shuanda	0.0-014 (suchus)

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## MANNING SEED COMPANY

DEXTER HORTON BUILDING SEATTLE 4, WASHINGTON, U.S.A.

BULLETIN NO. 2

### DOUGLAS FIR SEED SOURCES



The parentage of tree seed greatly influences the quality and rate of growth of all planted forests. Because of this fact, MANNING SEED COMPANY has enlarged its collection area to supply seed from high quality trees in a variety of situations in order to better meet the requirements of our customers.

To insure the integrity of every seed source, our seed has been collected and carefully processed under the direct supervision of technically trained foresters. Each lot of seed is positively identified with the area from which it was collected so that we can duplicate future collections at your request.

We suggest that you follow two principles of sound management in purchasing seed for reforesting your land:

- 1. Play safe by using seed from a climatic environment similar to the area to be reforested.
- 2. Experiment with seed from other environments in an attempt to introduce better trees of faster growth.

We collect seed from all locations in the Pacific Northwest some of which are listed on the attached sheet. Each locality is coded by a system that is based on seed zones as designated by Manning Seed Company with weather data as compiled by Leo A. Isaac of the Pacific Northwest Forest and Range Experiment Station and published in his bulletin "Better Douglas-fir Forests from Better Seed".

MANNING SEED COMPANY

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# MANNING SEED COMPANY

DEXTER HORTON BUILDING SEATTLE 4, WASHINGTON, U.S.A.

#### BONDED MANINGSEED

Bulletin No. 13

We are pleased to announce that we have made a spec-APR 2 - 1954 ial collection of Douglas Fir cones for experimental plantings.

These cones, from which our Bonded Douglas (Green) Tree Seed Ispartment of Agriculture Seed Collection Area Map) and will be available for delivery this fall.

The Douglas fir comes for Bonded Maningseed have been hand-picked under the supervision of graduate foresters at many locations and elevations to meet the requirements of our many customers throughout the world.

If you will please tell us by return mail which regions and elevations are of interest to you, we will gladly advise regarding availability and price. Please do not order more than 4.4 lbs. (2 kilos) of Douglas fir seed from any one region as our supply of this special seed is limited.

Collections can also be made in Canada and Alaska by qualified foresters when arrangements are made well in advance of the September and October cone harvest season.

Orders for Bonded Douglas (green) will be filled in the order of receipt, as long as our supply lasts.

MANNING SEED COMPANY

HENS LETTER

Solletin No. 13

#### BONDED MANINGSEED

We are pleased to amounce that we have made a specisl collection of Douglas Fir comes for experimental plantings. These comes, from which our Bonded Douglas (Green) Tree Seed is supplied, come from Regions 1, 2, 3, 5, 6, 7 and 8 (see Maningseed Collection Area Map) and will be available for delivery

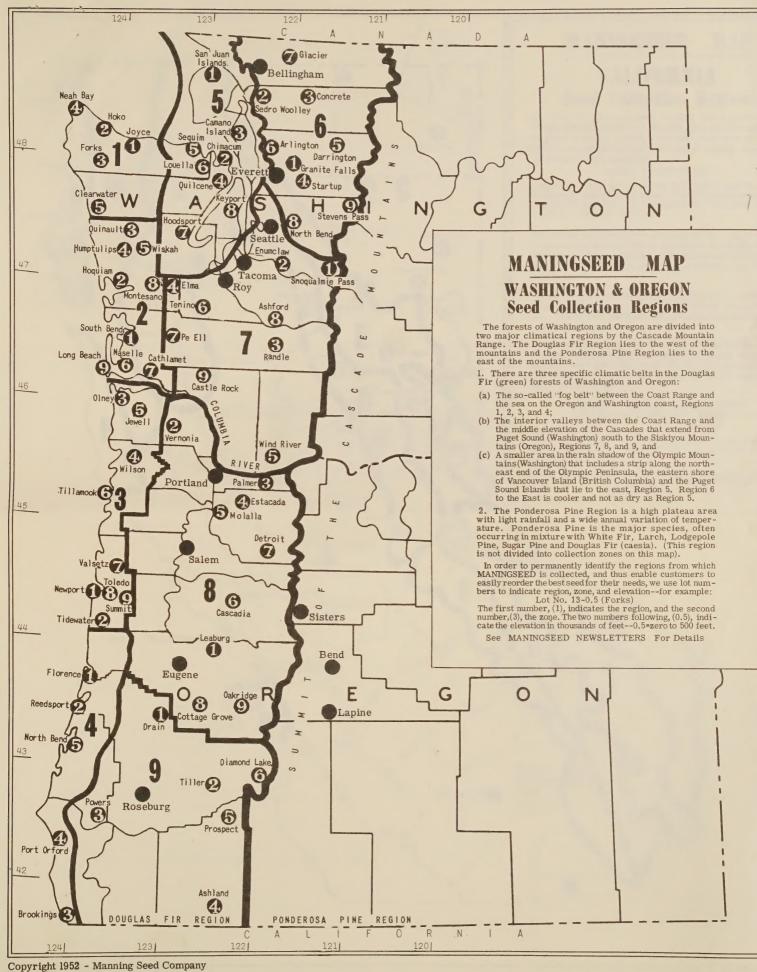
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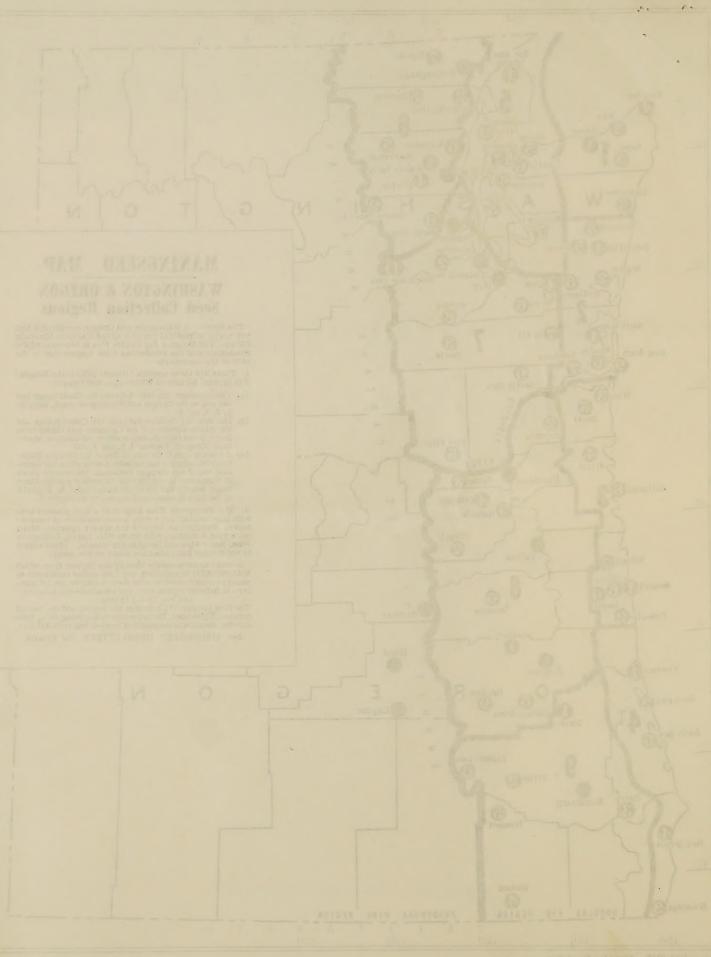
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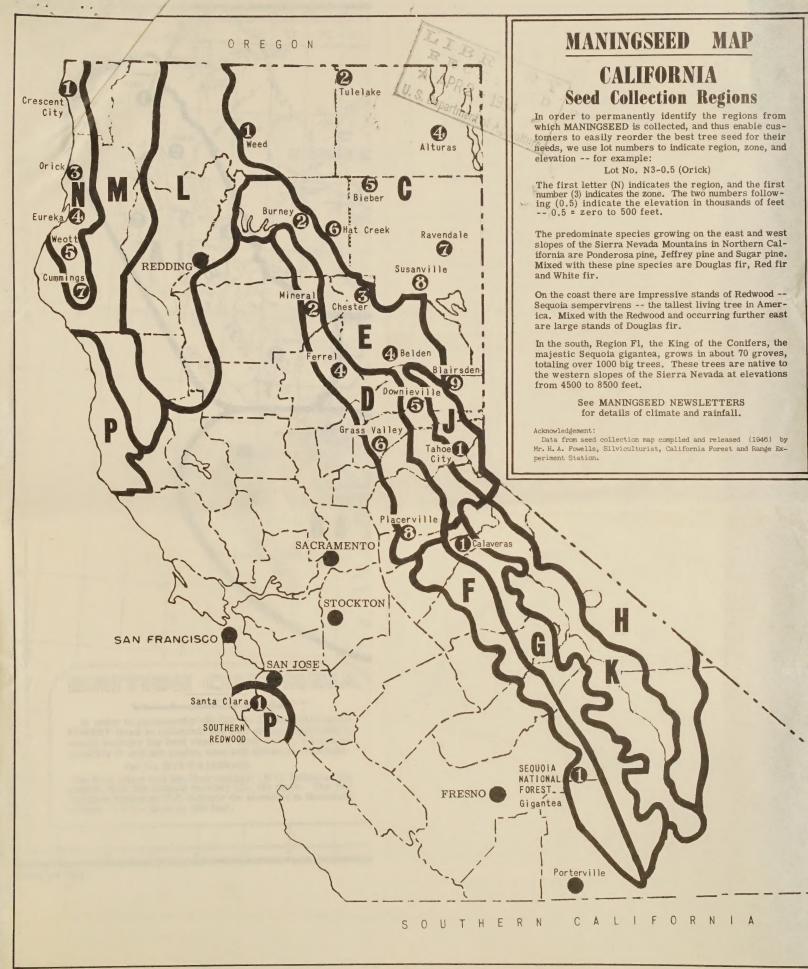
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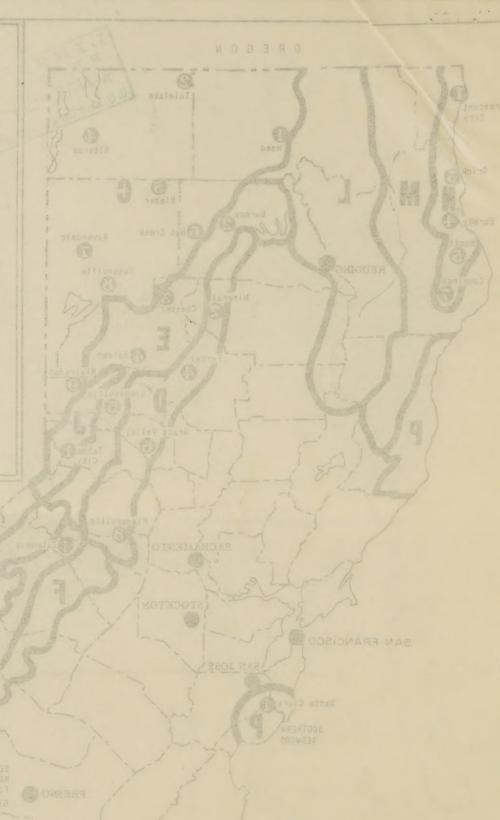
Orders for Bonded Dougles (green) will be filled in

MANWING SITED COMPANY









# MANINGSHED MAP

### CALIFORNIA Seed Collection Regions

In order to permanently identify the rigions from which MARTMGEERD is collected, and thus subject as local true seed for their needs, we use tot ammours to indicate region, zone, and elecation - for example:

Lol No. 143-0.5 (Orlek)

The first teller (8) indicates the region and he that bender (3) believes the cone. The two numbers following (0.5) believes the elevation in thousands of testing (0.5) early to 500 feet.

The predominate species growing on the east and west support of the Sterra Nevada Mountains in Morthern Cal-Hornia are Posterosa pine, leftrey pine and Sugar pine. Mixed with these pine species are Douglas fir, Red fir and Widte fir.

On the coast there are impressive stands of itschool --Sequois sempervisers - the talless living tree in Ameries, Minsel with the Redwood and occurring further sust are bren atands of Doughes for

In the south Hegion FI, the King of the Coulers, the majestle Requote signatur, grows in about 70 groves, bioliting over 1000 big trees. These trees are native to the vesters sinces of the Sierra Newada at elevations from 4500 to 5500 feet.

See MANINGSEED NEWSLETTERS for details of diffusie and syndall.

List form year controlling our contrag and released to the Art No. 4. Commission of the Commission of

V. UUDALITAD NABHINOS

### MANINGSEED Map of BRITISH COLUMBIA **Seed Collection Regions** Trees are more sensitive to climate than NORTHERN is generally anticipated, and when moved to a unsuitable location, they are affected by frost, heat, or drought, and are often overly susceptible to disease. BOV 电图 The most important factors to observe in locating correct seed sources for conifer-MTERIDR 4 ous tree seeds are average annual temperature, minimum temperature, rainfall, and general moisture conditions of the atmosphere. There are abrupt changes in average annual temperature and in precipitation from south to north and from the coast inland. Therefore, four generalized regions in British Columbia were set up based on weather records of the Department of Agriculture of British Columbia and data furnished by the British Columbia Forest Service. MANINGSEED NEWS LETTERS For Details 0 BRITISH COLUMBIA In order to permanently identify the regions from which FOREST-Seed is collected, and thus enable customers to easily reorder the best seed for their needs, we use lot numbers to indicate region, zone, and elevation--example: Lot No. B 13-0.5 (Alberni) The first letter and the first number, (B 1), indicates the region, and the second number (3), the zone. The two numbers following (0.5) indicate the elevation in thousands of feet --0.5 = zero to 500 feet. Copyright 1953



# AVIS

### A tous les Acheteurs de graines forestières

omme principaux distributeurs de graines forestières, nous sommes heureux de faire connaître un nouveau programme pour la récolte des graines de conifères rationnellement établi sur des bases scientifiques.

La MANNING SEED COM-PANY préconise ce programme afin d'assurer d'une façon plus certaine le succès des entreprises actuelles et futures de reboisement. Le succès d'un projet quelconque de reboisement artificiel entrepris sur une vaste échelle est partiellement déterminé par la qualité des graines forestières employées. Dans les années passées, il a été établi que la grande mortalité dans beaucoup de plantations était due, le plus souvent partiellement, à la défaillance des planteurs, incapables de désigner d'une façon spécifique les graines d'origine requises.

Il est bien connu que la qualité des graines forestieres est déterminée par plusieurs facteurs qui ont pour base les considérations suivantes : origine, authenticité, pureté, viabilité. Il entre dans nos intentions de mettre à votre portée ces facteurs de la qualité des graines. Forestiers qui voulez de meilleures forêts, écrivez à notre Directeur Forestier au sujet des graines dont vous avez besoin. Tous détails sur notre programme pour la Récolte des

graines pour 1950 vous seront fournis sur demande.

Notre programme pour la Récolte de 1950 est établi pour faire face aux besoins de trois types d'acheteurs en gros de graines forestières.

- 1° Acheteurs par contrat pour qui nous récoltons la graine chaque année sur leur propre propriété, ou sur des aires spécifiquement déterminées en vue de l'application d'un plan de reboisement préétabli.
- 2° Acheteurs saisonniers pour qui nous récoltons la graine de sources spécifiquement sélectionnées dans des lots pré-déterminés. Les prix sont établis à l'avance, selon les conditions de la récolte. Les ordres doivent nous être remis avant la saison de la récolte des cônes.
- 3° Graines d'origine spécifiquement déterminée à l'usage des pépiniéristes ou marchands de graines, utilisables pendant le cours d'une année.
- ★ SI vous achetez des graines en gros vous serex intéressés par tout ce que notre Programme Scientifique pour la Récolte de 1950 paut vous offrir. Écrivex, télégraphiex ou téléphonex aujourd'hui,

# MANNING SEED COMPANY

DEXTER HORTON BUILDING SEATTLE 4, WASHINGTON

John G. Cameron Chief Forester

U. S. A.

F. E. Manning General Manager

MEILLEURES GRAINES FORESTIÈRES - POUR DE MEILLEURES FORÊTS



# Mitteilung

## für alle Käufer forstlicher Sämereien

Als führende Verteiler forstlicher Sämereien können wir ein neues Programm der Ernte von Koniferen-Samen auf wissenschaftlicher Grundlage mitteilen.

Die "Manning Seed Company" veranlaßt dieses Programm, um den Erfolg gegenwärtiger wie zukünftiger Wiederaufforstungsprojekte vollständiger zu sichern als bisher. Im großen und ganzen ist der Erfolg eines jeden Projekts künstlicher Wiederaufforstung durch die Güte des benutzten Samens bestimmt. Die vergangenen Jahre lehrten, daß die hohen Pflanzensterblichkeiten mancher Kulturen nicht selten zu einem Teil auf die Auswahl einer für den Anbau ungeeigneten Saatgutherkunft zurückzuführen war.

Zu den grundlegenden, die Samengüte beeinflussenden Faktoren zählen bekanntermaßen: Herkunft, Art-Reinheit, Saatgutreinheit, Keimkraft. Wir beabsichtigen, diese Merkmale besonderer Samengüte Ihnen zum Gelingen Ihrer Pflanzungen zu garantieren. Forstleute, die bessere Wälder begründen wollen, werden gebeten, unserem Forstlichen Leiter ihren Samenbedarf mitzuteilen. Einzelheiten unseres

Samener<br/>nteprogramms 1950 stehen auf Anfrage zur Verfügung.

Der Bedarf von drei Käufergruppen soll durch unser Ernteprogramm 1950 befriedigt werden.

- 1. Vertragskunden: für sie sammeln wir jährlich in deren Waldungen, oder zur Durchführung besonderer Wiederaufforstungspläne in bestimmten Waldgebieten.
- 2. Saisonkunden: für sie sammeln wir im voraus festgelegte Saatgutmengen bestimmter Herkunft zu den nach den Erntebedingungen zuvor festgelegten Preisen. Aufträge müssen vor der Zapfenreife mit uns abgeschlossen werden.
- 3. Besonderes Original-Saatgut für Pflanzschulen und Samenhändler. Gültig nach Vereinbarung von Jahr zu Jahr.

Wenn Sie Saatgut in Großhandelsmengen kaufen wollen, dann werden Sie sich für die Möglichkeiten interessieren, die unser wissenschaftliches Saatgutbeschaffungsprogramm 1950 Ihnen bietet. Schreiben Sie uns Ihre Wünsche noch heute!

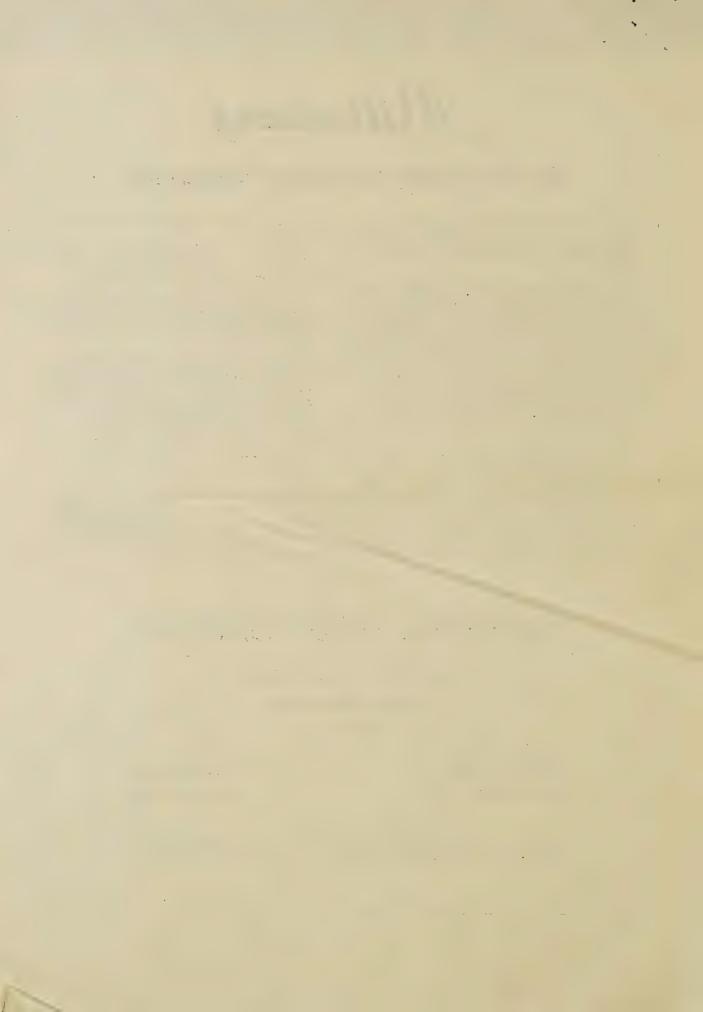
# MANNING SEED COMPANY

840 Dexter Horton Building Seattle 4, Washington U. S. A.

John G. Cameron Chief Forester

F. E. Manning General Manager

Besserer Forst/Samen - bessere Wälder!



# ANNOUNCEMENT

For All Forestry Seed Purchasers

As Leading distributors of forest tree seed, we are pleased to announce a new and more scientific program for the collection of coniferous tree seed.

The Manning Seed Company is instigating this program to more fully insure the success of current and future reforestation programs. The success of any large-scale artificial reforestation project is partially determined by the quality of the tree seed used. In past years it has been found that the high mortality in many plantations has been due partially, but not infrequently, to the failure of planters to designate specifically the seed origin required.

It is well known that the quality of tree seed is determined by many factors which include the following basic considerations: origin, genuineness, purity and viability. It is our intention to make these factors of seed quality available to you. Foresters who want better forests should write our Chief Forester regarding their seed requirements. Details of our Seed

John G. Cameron

Chief Forester

Collection Program will be supplied upon request. 1954
Our Collection Program is arranged to meet the needs of three types of wholesale buyers of forest tree seed:

- 1. Contract Buyers—for whom we collect seed each year from specific areas for a planned reforestation program.
- 2. Seasonal Buyers—for whom we collect seed from specific sources in pre-determined amounts. Prices are estimated in advance, subject to crop conditions. Orders must be placed with us prior to cone harvest in August.
- 3. Specific Origin Seed
  —for general use by
  nurserymen or seed
  dealers. Available on a
  year around basis.

If you purchase seed in wholesale quantities, you will be interested in what our Scientific Collection Program can do for you. Write or call today.

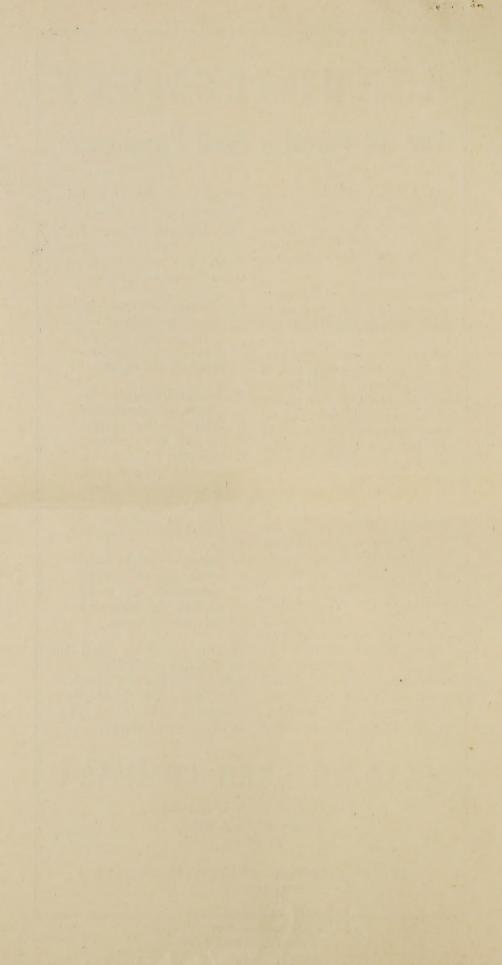
# MANNING SEED COMPANY

840 Dexter Horton Building Seattle 4, Washington U. S. A.

F. E. Manning President

BETTER TREE SEED—FOR BETTER FORESTS

— SINCE 1871 —



# \* NEWS LETTER



# MANNING SEED COMPANY

DEXTER HORTON BUILDING SEATTLE 4, WASHINGTON, U.S.A.

BULLETIN No. 14

LIBRARY
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A APR5 - 1954
U. S. Department of Asticulture

### BEAUTIFUL EVERGREEN CONES

OPEN \*\* AIR DRIED \*\* FOR DECORATIVE PURPOSES

Packed in lettuce crates containing approximately 2-3/4 bushels each.

Species	Size	Price per Less than 10 Crates	Crate* More than 10 Crates
SUGAR PINE	20-35 cones per crate 8"-16" long3"-5" diam.	\$2.50	\$2.00
JEFFREY PINE	30-45 cones per crate 6"-8" long, 5" diam.	2.50	2.00
PONDEROSA PINE	2½"-5" long	3.00	2.40
LODGEPOLE PINE	2"-3" long	3.00	2.40
WESTERN HEMLOCK	1/2"-1" long	3.00	2.40
SITKA SPRUCE	$2''-3\frac{1}{2}''$ long	2.00	1.60
DOUGLAS FIR	$2'' - 3\frac{1}{2}''$ long	2.00	1.60

\* Prices f.o.b. Tacoma, Washington

\* \* \*

When ordering please specify number of crates of <a href="each species">each species</a> desired.

Shipment will be made immediately upon receipt of your check.

Our supply of these decorative cones is limited. Place your order early to assure a full assortment.

MANNING SEED COMPANY

MALLEN NO. 21

### BEAUTIFUL EVERGREEN COMES

OFEN AS AIR DRIED 48 ROR RECORATIVE PURFOSES

Packed in lettuce crates containing approximately 2-3/4 bushels each.

er crate* More than	Price p		
10 Orates	10 Crates	Size	Species.
62.00	08.80	20-35 cones per crate 8"-16" long3"-5" diam	SUGAR PINE
00.8	2.50	30-45 cones per crato	ENIA KERFIEL-
04-8	3,00	25-n-2n Jour	FONDEROSA PINE
04.5	3.00	2n-3" long	LODGEFOLE PINE
2.10	3,00	auot "I-n <del>į</del>	WESTERN HEMLOCK
1.60	2,00	2"-32" long	SITKA SHRUCE
2.60	2.00	Suol nate-no	DOUGLAS FIR

<sup>\*</sup> Irices f.o.b. Tacoma, Washington

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WANNENG SEED COMPANY